

# Montana and the Sky



Vol. 36, No. 5

MONTANA AERONAUTICS DIVISION

May 1985

## TWO HELENA TEACHERS SELECTED FOR NASA'S TEACHER IN SPACE PROGRAM

Pat Johnson, a physics teacher at Capital High School in Helena, and Paul Dorrance, an electronics/physics teacher at Helena High, have been selected as Montana's candidates for the Teacher in Space Program. The announcement was made at a luncheon in Helena on April 29.

Selected as alternate was Judy Mathews, Missoula. The other two finalists were JoAnn Eisenzimer, Great Falls, and Myra Miller, Bozeman.



Montana's candidates for NASA's Teacher in Space Program were announced by Superintendent of Public Instruction Ed Argenbright. They are (from left) Paul Dorrance, Helena, candidate; Argenbright; Pat Johnson, Helena, candidate; and Judy Mathews, Missoula, alternate.



Fred Hasskamp congratulates JoAnn Eisenzimer, Great Falls, (left) and Pat Johnson for their selection as two of the five finalists in the Montana competition for the Teacher in Space Program. Both have been active in the Aeronautics Division's Aerospace Teacher Workshop Program.

The state Office of Public Instruction was in charge of the selection of Montana's candidates, and the Montana Teacher of the Year Committee served as judges. Winners were announced by Ed Argenbright, Montana Superintendent of Public Instruction.

State winners of the Teacher in Space Program will enter national competition. That field will be narrowed to ten semi-finalists in July, to five in August, and the national winner and alternate will be announced in September. The shuttle flight in which the teacher will participate is scheduled for early 1986.

The Montana Aeronautics Division is particularly proud of Pat

Johnson and JoAnn Eisenzimer. Both have been particularly active in the Division's Aerospace Teacher Workshop program for several years. Through this program they have taught summer workshops to Montana teachers in aerospace/aviation education and have thus helped numerous Montana youngsters understand the importance of aviation in our world. They have been recognized on both the regional and national levels for their achievements in aviation and aerospace education activities.

The Division extends its congratulations to the five finalists and particularly to Pat Johnson and Paul Dorrance. We will be watching with interest the final selection process.



# Administrator's Column

**Seeley Lake.** The Montana Aeronautics Board met on April 25 and 26, 1985, to review and discuss the findings and proposed actions resulting from a series of fact finding hearings conducted by the Department of Commerce regarding the safety issues involving boats and seaplanes at Seeley Lake. A considerable amount of input was presented by interested parties which included the U.S. Forest Service, Missoula County Airport Authority, Missoula County Sheriff, Seeley/Condon Chamber of Commerce, Seeley Lake Homeowners Association, seaplane pilots, and the Department of Fish, Wildlife, and Parks.

The Board felt that the entire responsibility for boat/seaplane safety cannot be placed solely on the seaplanes and the Department of Commerce and that there is a strong need for the full cooperation from the Montana Department of Fish, Wildlife, and Parks whose jurisdiction covers the boat operations and boat safety programs. The Board recommended that the Aeronautics Division work with the Fish, Wildlife, and Parks Department in providing a joint safety education program at Seeley Lake.

The Aeronautics Board for the first time went on record formally expressing their position that both boat and seaplane operations on Seeley Lake can be compatible if the rules and regulations are adhered to.

On May 14 Keith Colbo, director of the Department of Commerce signed into effect Emergency Rules In the Matter of the Seeley Lake Seaplane Base, placing certain seaplane use restrictions as follows:

1. No seaplane, except when necessary, shall land, takeoff, or "step taxi" on, from, or through the South Bay, residential area of Seeley Lake, which comprises the southern one-fifth of the lake. This rule does not restrict or prohibit seaplane landings, takeoffs, or taxiing on Seeley Lake other than in the South Bay.

2. Seaplanes shall land, takeoff, and taxi in the center-most portion of the lake along an imaginary line equidistant from the shorelines and shall obey all rules concerning vessel rights-of-way while taxiing.

3. Until further notice, "rides-for-hire" which originate and terminate in the South Bay of Seeley Lake are restricted as follows:

- a. No "rides-for-hire" shall be provided on May 24, 25, 26, and 27, 1985; July 3, 4, 5, 6, and 7, 1985; and August 30 and 31 and September 1 and 2, 1985.

- b. No "rides-for-hire" shall be provided on Saturdays or Sundays on July 20, 21, 27, and 28, 1985, or August 3, 4, 10, and 11, 1985.

4. The manager/owner/operator of Lindey's Landing West shall maintain comprehensive records and logs relating to the daily use of Lindey's Landing West by seaplanes, including but not limited to the date and time of arrival at and departure from Lindey's Landing West; the amount of fuel dispensed to seaplanes; a description of each flight; i.e., transient, private, rides-for-hire, etc; landing conditions at times of arrival and departure; incidents or interferences between seaplanes and other lake users or any other emergency or unusual event from whatever cause which affects seaplane use of Seeley Lake.

The manager/owner of Lindey's Landing West shall make a special effort to inform seaplane pilots who intend to land on Seeley Lake and who have contacted Lindey's Landing West by radio or otherwise of these emergency rules and restrictions.

5. The Department of Commerce will investigate complaints relating to abuse of these emergency rules. Complaints must be submitted by sworn affidavit of two or more individuals who witnessed the incident. Affidavits of Complaint may be mailed to: Keith Colbo, Director, Department of Commerce, 1424 9th Avenue, Helena, Montana 59620.

A public meeting will be held at the Department of Commerce conference room on Friday, May 24, 1985, to discuss the above emergency rules with the interested parties as well as county, state, and federal agencies.



Montana and the Sky  
USPS 359 860  
DEPARTMENT OF COMMERCE  
Ted Schwinden, Governor  
Keith Colbo, Director

Official Monthly Publication  
of the  
AERONAUTICS DIVISION  
Phone 444-2506  
Box 5178  
Helena, Montana 59604  
Michael D. Ferguson  
Administrator

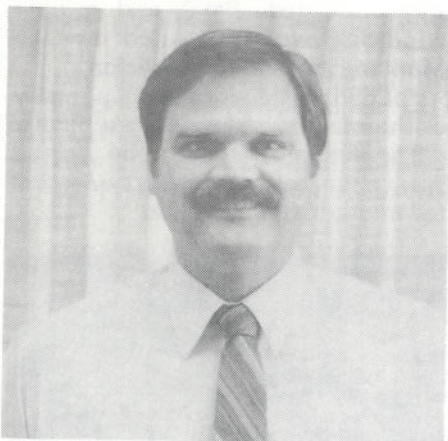
AERONAUTICS BOARD  
James A. McLean, Chairman  
C.R. Ugrin, Member  
Myron K. Strand, Member  
Terry D. Marshall, Member  
Theodore Mathis, Member  
John A. Wall, Member  
Robert Worthington, Member  
Bradley DeZort, Member  
Fred Lark, Member

MONTANA AND THE SKY is  
published monthly in the interest of  
aviation in the State of Montana.  
Second-Class postage paid at  
Helena, Montana 59604  
Subscription \$2.00 per year  
Editor: Martha E. Kurtz

"POSTMASTER: Send address  
change to Montana and the Sky,  
Box 5178, Helena, Montana  
59604."



## Helena FSDO Welcomes Waterman



Ron Waterman has been appointed new Operations Inspector at the Helena FSDO office.

Ron comes to the FSDO from San Antonio, Texas, (he says he's not a Texan) where he was an air traffic controller at the International Airport. He has a strong general aviation background, having been a flight instructor and flight school manager. He also has air taxi experience which included flying everything from "bodies to bankers" and operating out of international airports and dirt strips all over the southwest. He also worked as commuter pilot.

Having graduated from college in Los Altos Hills, Calif., Ron served in the Army Signal Corps in Vietnam. He holds several pilot ratings including ATP, multi-engine, seaplane, and CFI.

Ron and his wife Patty have two daughters.

## Cut Bank FSS Phone Changes

Effective April 15, the listed telephone number for the Cut Bank Flight Service Station will change from 873-4522 to 873-4154 or 873-4155.

These new numbers will be in rotary, providing a continual two-line service for pilot weather briefing and flight planning.

## Certificates Issued by Helena FSDO

### PRIVATE

Lois Ramberg ..... Chinook  
Jeffrey Mayfield ..... Billings  
Greg Volney ..... Williston, ND  
Lavern Decker ..... Powell, WY  
Kathleen Dignen ..... Minneapolis  
Glenn Oakes ..... Bozeman  
David Shallow ..... Wasilla, AK  
Bryan Adams ..... Missoula  
Larry Dempsay ..... Wolf Point  
Bradley Iwen ..... Wolf Point  
Nancy Carlson ..... Tioga, ND  
Merton Musser ..... Billings  
April Carr ..... Gardiner  
David MacEngh ..... Billings  
Gerald Wilkins, Sr. .... Powell, WY

### COMMERCIAL

Stephen Romines ..... Billings  
Steven Porter ..... Anchorage, AK

### INSTRUMENT

Patricia Wood ..... Great Falls  
Warren Dignen ..... Minneapolis  
George Shroyer ..... Bozeman  
Keith Peterson ..... Billings  
Harry Andersen ..... Lolo  
Donald Anderson ..... Billings

### MULTI-ENGINE

Ellen Fahres ..... Harlem  
(Received in Florida)

### ATP

Dwight Sharpe ..... Regina, Sask.  
James Dickie ..... Calgary, Alberta

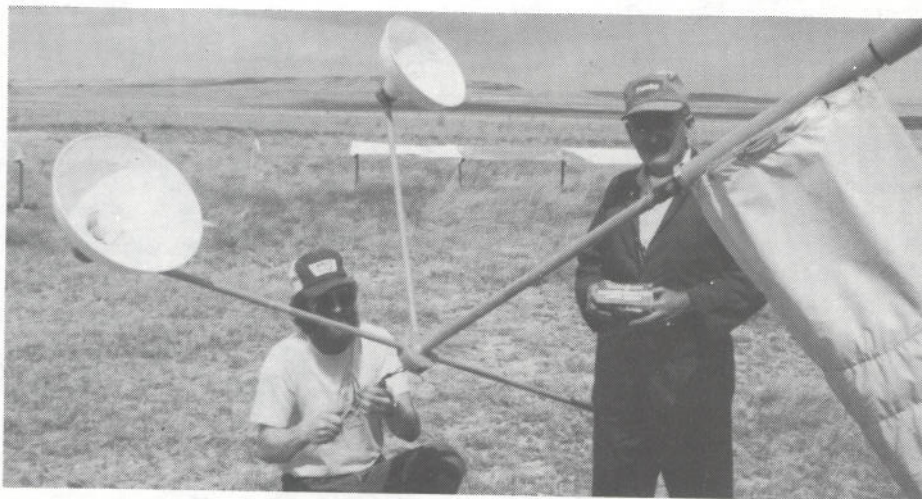
### INSTRUCTOR

Randal Siemens ..... Whitehall  
(Ground)  
Ellen Fahres ..... Harlem  
(Instrument - Received in Florida)

### INSTRUCTOR RENEWAL

Larry Steck ..... Helena  
Richard Webb ..... Big Timber  
Donald Scalf ..... Kalispell  
William Stewart ..... British Columbia  
Gary Greenfield ..... Sioux Falls, SD  
Michael Morrison ..... Helena  
Paul Flood ..... Helena  
Thomas Shannon New Fairfield, CT  
Glenn Ferris ..... Powell, WY  
Charles Koehler ..... Kalispell  
Stephen Bakke ..... Kalispell  
Bruce Miklos ..... Aurora, CO  
Jack Daniels ..... Williston, ND  
Louis Kelleher ..... Bonner  
Bradley Anderson ..... Butte  
George Boian ..... Phoenix, AZ  
Kenneth Jackson ..... Billings  
Thomas Woodward ..... Cody, WY  
Donald Anderson ..... Billings

## Nav Aids Installed in Central Montana



Ken Elliott (right), airport manager at Harlowton, visits with Mike Rogan as he repairs a windsock standard on the airport. Mike and Jerry Burrows of the Division staff also installed a monitor on the NDB at Lewistown, checked the NDB at Conrad, and installed unicoms at Lewistown and Chester on a swing through the central part of the state in April.



## HUNTLEY RECEIVES VAN DE RIET SCHOLARSHIP



Michael J. Huntley, Missoula, is the recipient of the 1985 Van De Riet Flight Scholarship. Announcement of the scholarship recipient was made during the 1985 Statewide Aviation Conference in Great Falls, but Michael was unable to attend due to school activities.

Michael will graduate in June from Sentinel High School in Missoula. He has been an active member of the CAP since 1980, having attained the rank of Cadet First Lieutenant. He has attended the 1980, 1982, and 1984 Class A Summer CAP Encampments, receiving several awards. He made his first solo flight during the August 1984 Montana Solo Encampment and since then has logged over 28 hours.

Activities in high school have included the newspaper staff, symphonic and jazz band, youth symphony, choir, and All-State Band. Michael has also been active with youth groups at his church.

As to the future, Michael has received two nominations to the Air Force Academy and is hoping for an appointment.

The Van De Riet Scholarship was established in 1983 as a memorial to Jack. It is to be used for flight instruction for Montana pilots in the promotion of quality and flight safety.

## Canyon Ferry Airport Gets Spring Cleaning

A beautiful Sunday afternoon greeted the members of the Gallatin Valley Hangar and the Helena Hangar of the Montana Pilots Association on their annual joint meeting at the Canyon Ferry Airport April 14.

About 25 people turned out to help pick rocks off the runway, ser-

vice the windsock, and repaint where needed. Paint and a new windsock were provided by the Montana Aeronautic Division.

Following the work session, many of the members stayed for a picnic.

Thanks to all those who helped spruce up the Canyon Ferry Airport for another flying season.



**Marilyn and Laurence Siroky brought the whole family out to help with clean-up at Canyon Ferry.**



**Wayne Edsall and Bud Hall work together to install a new windsock.**



## CALENDAR

**June 8** - Fly-In at Crystal Lakes Resort. Phone 882-4455 for reservations.

**July 19-21** - Schafer Meadows Fly-In.

**July 19-21** - Gathering of the Classics Air Show, Kalispell City Airport, Kalispell.

**July 26-Aug. 2** - EAA International Fly-In Convention, Oshkosh, Wisc.

**July 27** - Hamilton to Jackpot Air Race.

**Aug. 2-4** - MAAA Fly-In, Three Forks. Contact Bud Hall at 586-3933.

**Aug. 3-4** - Northwest Mountain Region Safety Seminar hosted by Oregon Aeronautics, Bend, Ore.

**Aug. 4** - Missoula Air Show.

**Aug. 17** - Bozeman Air Show.

**Sept. 7** - Fly-In at Crystal Lakes Resort. Phone 882-4455 for reservations.

**Sept. 8** - Glacier Park International Air Show, Kalispell. Features the Thunderbirds.

**Sept. 13-15** - Mountain Search Pilot Clinic, Kalispell.

**Oct. 4-6** - Montana Flying Farmers Convention, Glacier Hotel, Cut Bank

**Oct. 5** - Great Falls to Jackpot Air Race.

## MAMA Officers Announced

During their spring meeting held in Great Falls in March, the Montana Airport Management Association elected the following officers to two-year terms:

President - Ted Mathis, Bozeman; Vice President (A & B Airports) - Monte Eliason, Kalispell; Vice President (B & C Airports) - Don Rees, Sidney; Secretary/Treasurer - Tom Binford, Billings; Directors - Ron Mercer, Helena; Joseph Reif, Hamilton; Tom Thomas, Great Falls; Executive Secretary - Hugh Kelleher, Helena.

MAMA holds two meetings each year, one in the spring and one in the fall.

## DIVISION SAFETY BUREAU BUSY WITH TOURS AND CLINICS



Spring is the time for school tours to the airport as the culmination of units on aviation. Here a group of Rossiter School children from Helena gather around Max Baumgartner at the Weather Bureau office as he explains weather forecasting.



Three excited little girls strap in for an orientation flight.



Fred Hasskamp traveled to Missoula on April 20 to conduct a mountain flying program for the CAP Pilot Safety Clinic.



## AIRPORT SAFETY/ORIENTATION PROGRAM BEGINS

By: David C. Kneedler, Chief  
Airport/Airways Bureau

The first of what is intended to be an ongoing series of statewide airport safety and orientation meetings was held February 12, 1985, in Hamilton. Attendees came from as far away as Missoula and Superior in addition to a cross section of Ravalli County aviation folks.

In part, this program was instituted in response to concerns expressed by the Montana Airport Management Association and others that a more direct and active approach be taken regarding airport safety issues. In discussions with FAA's Helena Airports District Office, it was decided that the scope of the program should be expanded to include orientation subjects of a more general nature in addition to airport safety issues. Accordingly, the format has been designed to be of interest to the entire aviation community - pilots, fixed base operators, airport management, etc.

In 1978 the Montana Aeronautics Division held what was hoped to be the first annual Airport Maintenance Seminar and invited managers and operations people from throughout the state. We quickly found that only the larger airports in the state have travel budgets for full-time managers and, thus, most of the general aviation

airports were unable to take advantage of material presented at the seminar.

Because of that experience, the FAA/Aeronautics Division program will consist of meetings held throughout the year in a different location each time. We feel this will enable anyone interested to attend the meeting without undue burden. In addition, each meeting will consist of two sessions - one in the afternoon and one in the evening - making it unnecessary for anyone to be absent from their job to attend a session.

The meetings are arranged and hosted by the local airport and are conducted by FAA and Aeronautics Division personnel. Representatives from those agencies include the FAA's Airports District Office, the Flight Standards District Office, and air traffic in addition to the state's Airport/Airways Bureau and Safety and Education Bureau personnel.

The next of these meetings is scheduled for Kalispell on May 22, and we hope to attract participants from Bigfork, Kalispell, and Whitefish at the least. The meeting after that is scheduled for Miles City at a date yet to be chosen.

We solicit your support for and participation in these meetings and would appreciate any comments or suggestions you may have for improvement.



Dave Kneedler speaks to pilots and airport managers during an airport safety/orientation program in Hamilton in February. This was the first of several such programs planned for the state.

## EAGLE FLIGHT OPENS AT GALLATIN FIELD

Whatever happened to Patty Mitchell?? Well, she went back to Bozeman and, in partnership with Lynn Kitto, opened Eagle Flight Aviation, a new FBO on Gallatin Field at Belgrade.

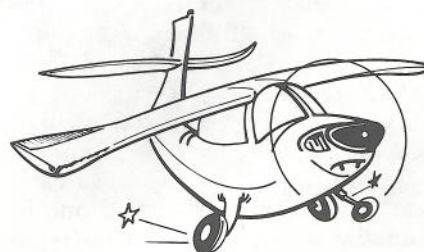
The grand opening of Eagle Flight Aviation was held April 12 and 13.

Eagle Flight offers flight instruction and scenic flights. Patty's husband Robert is doing aircraft maintenance. They hold a Part 135 certificate.

Call them at 388-6111 or stop in next time you're in Bozeman.



Robert and Patty Mitchell and Lynn Kitto pose for the camera in their new hangar during the grand opening of Eagle Flight Aviation at Gallatin Field in April.





## Carburetor Ice - Not Nice!!

By: Allen B. Neal  
Accident Prevention Specialist  
Helena FSDO

Several recent incidents and accidents in the state have been attributed to induction system icing. Because induction icing accidents can be prevented by the pilot in virtually all cases, improved pilot awareness, attention and adherence to recommended procedures is needed to reduce these accidents.

Induction system icing may be characterized as impact ice, fuel vaporization ice, and throttle ice.

Impact ice is formed by the impingement of moisture-laden air at temperatures between 15 degrees F and 32 degrees F onto elements of the induction system which are at temperatures below 32 degrees F. Be particularly alert when operating in snow, sleet, rain, or clouds when the temperature is about 25 degrees F.

Fuel vaporization ice forms downstream from the point at which fuel is introduced. When moisture in the fuel/air mixture reaches a freezing temperature as a result of cooling by fuel vaporization, excess water is condensed and freezes on induction system structures. The usual range of ambient temperatures for this type of icing is 32 degrees F to 80 degrees F although the upper limit may reach 100 degrees F. The minimum relative humidity generally necessary is 50% (temp-dew point spread of 20 degrees F or less) or higher, with the hazard increasing as the humidity level increases.

Throttle ice is formed at or near a partly closed throttle (butter-fly) when water vapor in the induction air condenses and freezes due to expansion cooling as the air passes the restriction imposed by the throttle. This temperature drop normally is not more than 5 degrees F nor will icing occur when the ambient air is 37 degrees F or higher. However, when there is a fuel-air mixture at

the throttle, icing can occur at higher ambient temperatures due to the cumulative effect of fuel vaporization and throttle ice phenomena.

Carburetor ice should be considered immediately as the possible cause of a power loss. With a fixed pitch propeller, a power loss is obvious by an engine speed reduction. When there is a manifold pressure gauge, a reduction in pressure would show up with the engine speed reduction. With a constant speed propeller, only the manifold pressure would decrease. An iced carburetor might cause engine roughness but may not occur until the engine is close to complete stoppage.

If carburetor ice is suspected, immediately apply full heat. Watch for further power loss to indicate the effect of the heat, then a rise in power as ice melts. Do not disturb the throttle or heat until improvement is noted. Partial carburetor heat can be worse than none at all. Under certain conditions where partial heat may raise the temperature to a level more conducive for icing, full heat would raise temperatures out of the icing range entirely.

The importance of guarding against over use of carburetor heat should be recognized. Remember that when induction air temperature goes up, the horsepower goes down. Full carburetor heat at high power levels and high ambient temperatures can cause cylinder overheating and even detonation damage. Note that under high power conditions carburetor heat is rarely required.

Engine installations employing a float type carburetor and having the fuel introduced upstream from the throttle valve would be the most susceptible to icing. The least susceptible would be an installation with direct cylinder fuel injection, although the associated induction system might still be subject to impact and throttle icing.

## Customs Rule Change Makes Border Crossing Cheaper

A recent rule change regarding border crossing has an unintended benefit for Part 135 operators clearing customs outside normal duty hours, according to a regulatory report received from NATA.

Customs Regulations Amendment Relating to Reporting Requirements for certain commercial aircraft (T.D. 84-236) dated November 28, 1984, reclassified unscheduled commercial operations as private aircraft in order to force landing at designated airports for customs inspection and clearance.

The question was raised by NATA as to why operators should pay commercial fees for overtime if they are classified as private aircraft. The spot ruling was that they should only pay private operator fees which are normally only \$25.

Individual customs agents may not interpret the rule properly. Operators may make copies of the Federal Register and refer to those portions of the background information that deal with the "expanded definition of private aircraft." If the customs agent does not agree, then NATA would recommend that the operator pay the assessment and appeal to the regional customs director for a refund based on the new definition.

The rule is final, and the definition will stand until revised. An operator would be on firm legal ground in requesting a refund.

For further information, contact Beverly Draughon, Director, Operations and Regulatory Affairs, NATA, 4226 King Street, Alexandria, VA 22302. Phone 703-845-9000.





## Kalispell Plans Classics Air Show

The Second Annual Gathering of the Classics Fly-In and Airshow will be held at the Kalispell City Airport on July 19 -21.

The weekend will include aircraft judging, static displays and social events. An air show on Sunday will feature top aerobatic and skydiving acts.

for more information, write to the Flathead Hangar of the MPA, Box 54, Kalispell, or call 257-8708.

## Northwest Safety Seminar to be Held in Oregon

Oregon State Aeronautics will host the 1985 Northwest Pilot Safety Seminar in cooperation with the Northwest Mountain Region of the FAA. The Seminar will be held at Bend, Oregon, August 3 - 4, 1985.

Previous such seminars have been held at West Yellowstone and at Wenatchee, Washington.

The program this year will include weather awareness, emergency preparedness, density altitude, mountain flying, flight physiology, collision avoidance, and legal rights.

There will also be a preflight inspection contest and aviation films.

The Bend Municipal Airport is located about six miles northeast of the city. The Bend area is noted for its abundant sunshine, the marvelous Deschutes River, intriguing geological features, and countless lakes.

For more information call the Oregon Aeronautics Division at 503-378-4880.

2,500 copies of this public document were published at an estimated cost of \$.26 per copy, for a total cost of \$660.10, which included \$521.10 for printing and \$139 for distribution.

### MEMBER

#### NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE—"To foster aviation, as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in research, development, and advancement of aviation; to develop uniform laws and regulations; and to otherwise encourage cooperation and mutual aid among the several states."



P.O. Box 5178  
Helena, Montana 59604

May 1985

Second-Class  
Postage Paid at  
Helena, MT 59604